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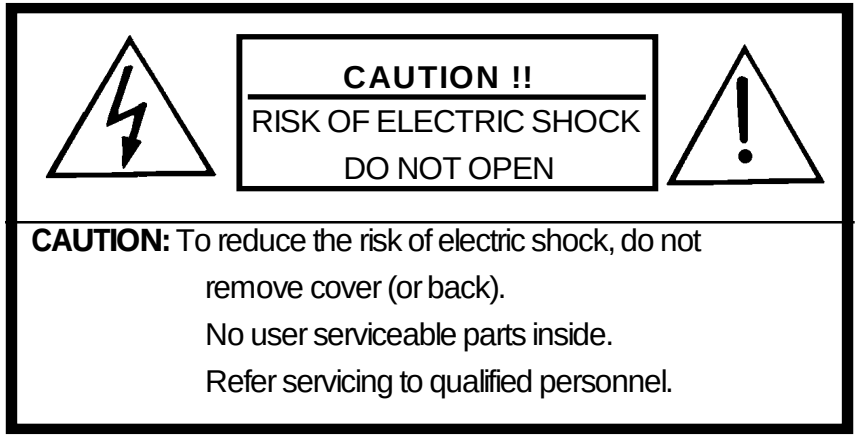
1. Cautions and Warnings


CAUTION !!
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: To reduce the risk of electric shock, do not
remove cover (or back).
No user serviceable parts inside.
Refer servicing to qualified personnel.

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS MONITOR TO RAIN OR MOISTURE.

"HIGH VOLTAGE EXISTS ON THE BACK LIGHT POWER LEAD OF THIS MONITOR. BEFORE SERVICING, DETERMINE THE PRESENCE OF HIGH VOLTAGE BY CONNECTING THE H.V. METER BETWEEN THE BACK LIGHT POWER LEAD AND CHASSIS ONLY."

For medical model only:

CAUTION: The power adapter use on the LCD monitor products has been evaluated and tested to comply with special use of medical equipment and certified under EN60601 and EN55011 standards. To prevent electric shock and fire hazard, Replaced or installed only with the same power adapter.
< Power adapter: EN60601 Certified, CHI, Type CH-1204M>
Note: For EN60950 and EN55022, the power adapter switch to "HJC", type HASU11B
To prevent shock, connect the medical monitor to personal computer that complied with this standard.

WARNING: To prevent overturn when moving, transport the equipment on flat surface only. Do not put on unstable position.

2. FCC Requirements

“This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.“

The equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in strict accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measure:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interconnected cables and shield power cords must be employed with this equipment to insure compliance with the pertinent RFD emission limits governing this device.

Changes or modifications not expressly approved by the manufacturer could void the user authority to operate the equipment.

Notice of Compliance with Canadian Interference-causing Equipment Regulations

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la Classe B respecte toutes les exigences du Reglement sur le materielle brouilleur du Canada.

3. Product Safety Precautions

Follow all warnings and instructions marked on the product.

- Do not use this product near water - e.g. near a bathtub, washbasin, swimming pool, kitchen, laundry tub or in a wet basement.
- This monitor should be installed on a solid horizontal base.
- When cleaning, use only a neutral detergent cleaner with a soft damp cloth. Do not spray with liquid or aerosol cleaners.
- Do not expose this monitor to direct sunlight or heat. Hot air may cause damage to the cabinet and other parts.
- Adequate ventilation must be maintained to ensure reliable and continued operation and to protect the monitor from overheating. Do not block ventilation slots and openings with objects or install the monitor in a place where ventilation may be hindered.
- This monitor should be operated from the type of power source indicated on the AC/DC adapter. Do not install this monitor near a motor or transformer where strong magnetism is generated. Images on the monitor will become distorted and the colour irregular.
- Do not allow metal pieces or objects of any kind to fall into the monitor through ventilation holes.
- Do not attempt to service this unit yourself. Removal of the monitor cover may expose you to dangerous voltage or other risks. Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel in the event that:

- Liquid is spilled into the product or the product is exposed to rain or water.
- The product does not operate normally when the operating instructions are followed.
- The product has been dropped or the cabinet has been damaged.
- The product exhibits a distinct change in performance, indicating a need for service.
- Power cord or plug is damaged or frayed.

4. Introduction

Welcome to enjoy the fantastic world of LCD-monitors. This new technology will bring you a whole new feeling for your “monitor”. We show here some of the major advantages of the LCD monitor. You will most certainly find some other advantages when you use it.

- The character of low radiation and less flicker reduce the probability of harm for your health compared to traditional CRT monitor.
- The LCD monitor’s compact size requires only minimal desktop space. These two merits make it easy to use in almost any environment and easy to transport.
- The LCD monitor has a low power consumption and offers savings on power bills and the earth’s resources.
- The design of the LCD cabinet is both attractive and ergonomic.
- The usage of the LCD monitor is the same as the CRT monitor. There is no need to change the hardware of your computer, just plug and play.
- Only for POS-model: An option provides VESA standard mounting function (Conforms to VESA FPMPMI specification).

5. Hardware Installation

This chapter will guide you through the correct installation procedures of your LCD monitor.

5-1. Unpacking

After you unpack your LCD Monitor, please make sure that the following items are included in the carton and in good condition. If you find that any of these items are damaged or missing, please contact your dealer immediately.

- One LCD Monitor
- AC/DC adapter with 12V DC output
- AC power cord
- VGA cable
- This user manual

5-2. Installation

This analogue LCD monitor **DOES NOT** require any special drivers. Necessary drivers are supplied by the graphics card manufacturer and may be found on the diskettes/CD supplied with the graphics card that came with your computer. Windows drivers for both the monitor and the graphics card are supplied on the Windows CD or diskettes. You may use the standard resolution XGA (1024×768) for MQ215 model and SVGA (800x600) for MQ212 model as the monitor type. The graphics card must also be set up correctly in Windows and make sure the video output of the graphics card is listed in Section 6.1 or check your Graphics card manual or Windows ReadMe file for further information on Graphics card. After the question listed above is solved, we continue the setup procedure as per below.

5. Hardware Installation

1. Power off both the Computer and Monitor before making any connections.
2. Install Monitor on a solid horizontal surface such as a table or desk.
3. Connect the power cable and the AC/DC adapter, then connect the adapter to the back of the LCD monitor.
4. The LCD monitor comes with a 15-pin video cable, you may use this cable for both IBM PC's & compatibles.

IBM PC's & COMPATIBLES

Connect the signal cable on the rear of the monitor to the 15-pin connector on the rear of the computer.

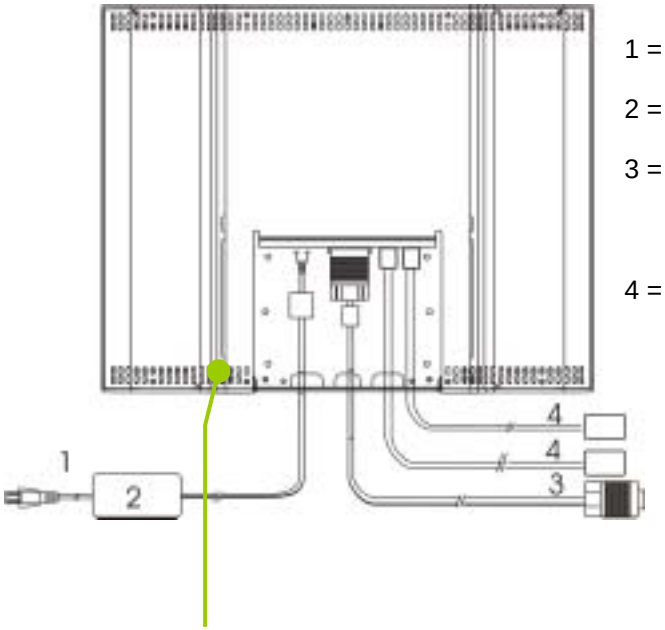
APPLE/MACINTOSH

Connect the signal cable on the rear of the monitor and connect a MAC adapter to the video connector on the rear of the Apple/Macintosh computer. Then, plug the other end of the signal cable into the MAC adapter. (Contact your local Apple dealer for information on purchasing the correct conversion connector.)

5. Tighten the screws of the Monitor cable until the connectors are fastened securely.
6. First, switch on power to the computer, then to the monitor.

5. Hardware Installation

The following picture provides the connection outline.



1 = Power cord

2 = AC/DC Adapter

3 = 15 pin D-SUB (VGA)

or DVI cable

4 = Option

Earth Protective
(For medical model only)

Option :

a). Touch- USB or RS-232 interface.

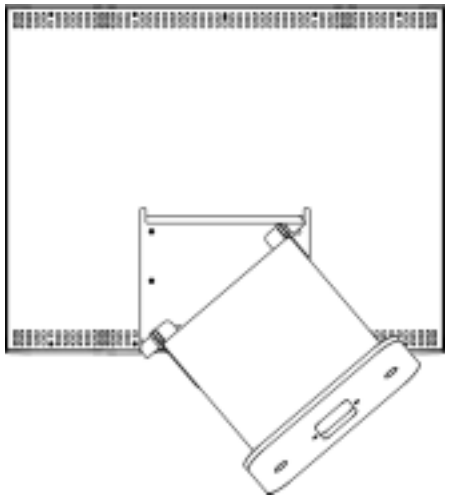
b). MSR - USB or RS-232 interface.

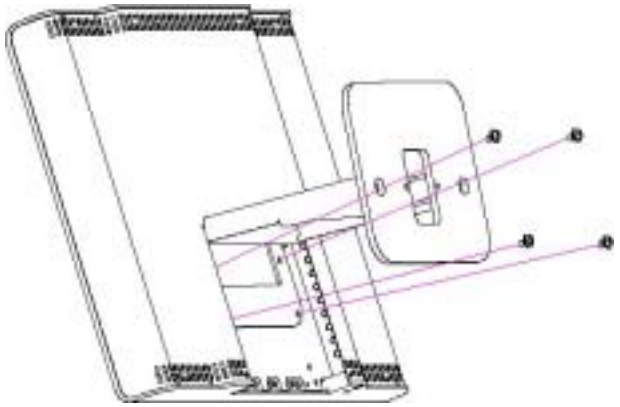
c). Speaker

d). Power USB-Hub.

5. Hardware Installation

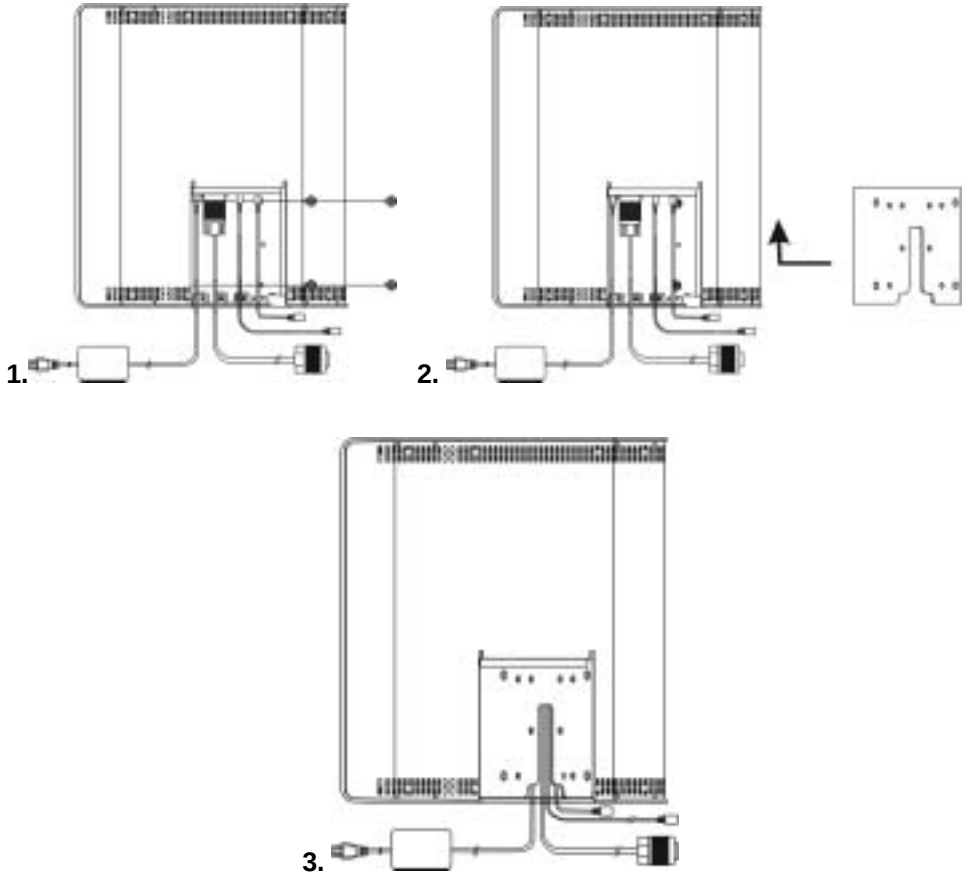
HINGE METAL





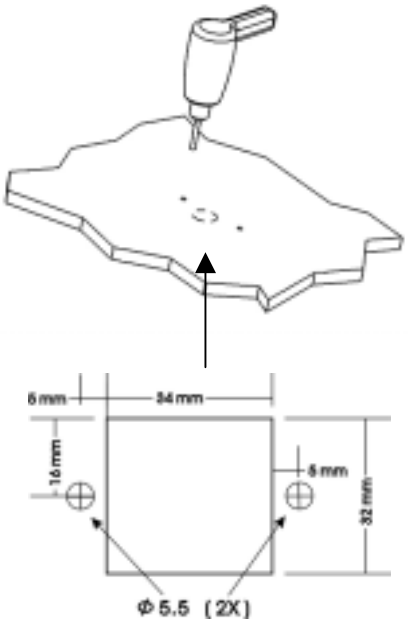
5. Hardware Installation

VESA BRACKET



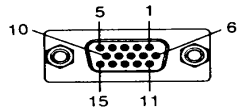
1. Turn the screws half into the back of monitor.
2. Hang the VESA-bracket with its key-holes on the above screws.
3. Tighten the screws till VESA-bracket is fixed.

TABLE MOUNT



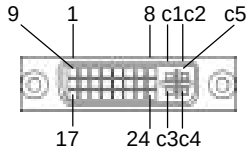
5-3. Video Input Pin Assignment

This section describes the pin assignment of the monitor's video connector. It is called a 15 Pin Mini D-sub Connector.



Pin No.	Signal Connector	Pin No.	Signal Connector
1	Red Video Signal	9	N.C.
2	Green Video Signal	10	Ground
3	Blue Video Signal	11	N.C.
4	N.C.	12	DDC data
5	Ground	13	Horizontal sync signal
6	Ground for red video signal	14	Vertical sync signal
7	Ground for green video signal	15	DDC clock
8	Ground for blue video signal		

29 Pin DVI-D Connector. (Only support to DVI-I function monitor)



Pin No.	Signal Connector	Pin No.	Signal Connector
1	T.M.D.S. Data2-	16	Hot Plug Detect
2	T.M.D.S. Data2+	17	T.M.D.S. Data0-
3	T.M.D.S. SGND	18	T.M.D.S. Data0+
4	T.M.D.S. Data4- N.C.	19	T.M.D.S. SGND
5	T.M.D.S. Data4+ N.C.	20	T.M.D.S. Data5- N.C.
6	DDC CLK	21	T.M.D.S. Data5+ N.C.
7	DDC DAT	22	T.M.D.S. CLK GND
8	A_VSYNC	23	T.M.D.S. CLK+
9	T.M.D.S. Data1-	24	T.M.D.S. CLK-
10	T.M.D.S. Data1+	C1	ANALOG RED
11	T.M.D.S. SGND	C2	ANALOG GREEN
12	T.M.D.S. Data3- N.C.	C3	ANALOG BLUE
13	T.M.D.S. Data3+ N.C.	C4	A_HSYNC
14	DDC POWER +5 V	C5	A_GND
15	GND		

6. Display Timing

6-1 Applicable video timing for video input

The following table lists the supported display quality modes that the LCD monitor provides. If other video modes are used, the monitor will stop working or display unsatisfactory picture quality.

MQ215 series model

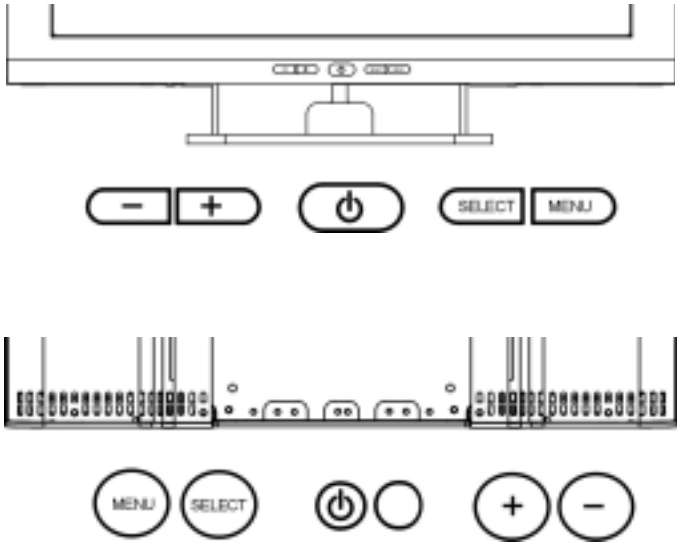
VESA MODES					
Mode	Resolution	Total	Horizontal	Vertical	Nominal Pixel Clock (MHz)
			Nominal Frequency +/- 0.5 kHz	Nominal Frequency +/- 1 Hz	
DOS	720*400@70 Hz	900*449	31.469	70.087	28.322
VGA	640*480@60 Hz	800*525	31.469	59.940	25.175
	640*480@72 Hz	832*520	37.861	72.809	31.500
	640*480@75 Hz	840*500	37.500	75.000	31.500
SVGA	800*600@56 Hz	1024*625	35.156	56.250	36.000
	800*600@60 Hz	1056*628	37.879	60.017	40.000
	800*600@72 Hz	1040*666	48.077	72.188	50.000
	800*600@75 Hz	1056*625	46.875	75.000	49.500
XGA	1024*768@60 Hz	1344*804	48.363	60.004	65.000
	1024*768@70 Hz	1328*806	56.476	70.069	75.000
	1024*768@75 Hz	1312*800	60.023	75.029	78.750
IBM MODES					
EGA	640*350@70 Hz	800*449	31.469	70.086	25.175
DOS	720*400@70 Hz	900*449	31.469	70.087	28.322
VGA	640*480@60 Hz	800*525	31.469	59.940	25.175
XGA	1024*768@72 Hz	1304*798	57.515	72.1	75.000
MAC MODES					
VGA	640*480@60 Hz	800*525	31.469	59.940	25.175
SVGA	832*624@75 Hz	1152*667	49.725	74.551	57.283
XGA	1024*768@75 Hz	1328*804	60.241	74.927	80.000

6. Display Timing

MQ212 series model

VESA MODES					
Mode	Resolution	Total	Horizontal	Vertical	Nominal Pixel Clock (MHz)
			Nominal Frequency +/- 0.5 kHz	Nominal Frequency +/- 1 Hz	
DOS	720*400@70 Hz	900*449	31.469	70.087	28.322
VGA	640*480@60 Hz	800*525	31.469	59.940	25.175
	640*480@72 Hz	832*520	37.861	72.809	31.500
	640*480@75 Hz	840*500	37.500	75.000	31.500
SVGA	800*600@56 Hz	1024*625	35.156	56.250	36.000
	800*600@60 Hz	1056*628	37.879	60.017	40.000
	800*600@75 Hz	1056*625	46.875	75.000	49.500
IBM MODES					
EGA	640*350@70 Hz	800*449	31.469	70.086	25.175
DOS	720*400@70 Hz	900*449	31.469	70.087	28.322
VGA	640*480@60 Hz	800*525	31.469	59.940	25.175
MAC MODES					
VGA	640*480@60 Hz	800*525	31.469	59.940	25.175
	640*480@67 Hz	864*525	35.000	66.667	30.240

7. Monitor Controls



[-] button Used for the following: • to scroll counter left in the menu • to decrease value of selected item • to adjust the contrast on the monitor (works without showing the menu system)	**[+] button** Used for the following: • to scroll right in the menu • to increase value of selected item • to adjust the brightness on the monitor (works without showing the menu system)
SELECT button To confirm the current selection. It's also used for going back to previous menu or sub-menu, and the changed data will be saved to memory.	**MENU button** Enters or exits the OSD (On Screen Display) menus. It also exits from the submenu back to the previous menu. This type of cancellation will not save the previous changes.
POWER INDICATOR (green) The LED will be lit in normal ON state, and will flash in power saving mode.	**POWER button** Pressing the power key will turn the monitor on. Pressing it again will turn it off.

7. Monitor Controls

7-1 Hot-keys

Auto Config: Pressing [-] and [+] simultaneously when the monitor is turned on starts the Auto Config mode.

Key-Lock function: Push and hold the Select button and then push the [-] and [+] buttons simultaneously and hold for one second. The buttons on the monitor are now locked. To unlock, do the same procedure again.

7-2 Screen Adjustment Operation Procedure

1) Entering the screen adjustment

The setting switches are normally at stand-by. Push the MENU key once to display the main menu of the screen adjustment. The adjustable items will be displayed in the main menu.

2) Entering the settings

Use the **[+]** and **[-]** keys to select the desired setting icon and push the [SELECT] key to enter sub-menu.

3) Change the settings

After the sub-menu appears, use the **[+]** and **[-]** keys to change the setting values.

4) Save

After finishing the adjustment, push the [SELECT] key to memorize the setting.

5) Return & Exit the MAIN MENU

To go back to the previous menu or exit the screen adjustment, push the [MENU] key. When no operation is done for around 60 seconds (default OSD timeout), it goes back to the stand-by mode and no more switching is accepted except [MENU] to restart the setting.

8. Screen Adjustment

8-1 Main Menu

The OSD (On Screen Display) main menu (Figure 8-1) is displayed on screen when [MENU] key is pressed. The OSD menu is a combination of graphics and text display. The first line always shows the current selected or active menu item. The bottom line of the main menu shows information for the selected function.

The **[+]** and **[-]** keys are used to scroll through items within the menu. The selected item is highlighted as the scrolling moves along. The [SELECT] key is used to activate the highlighted item during this state.

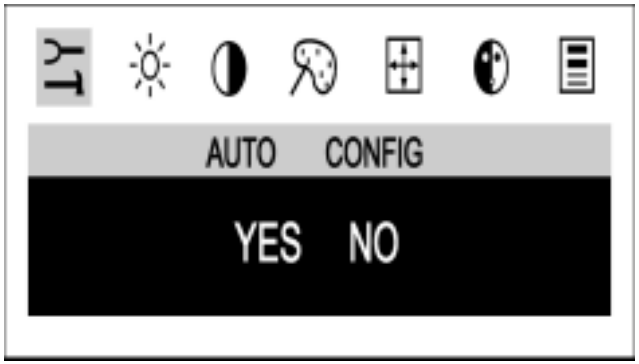


Figure 8-1. OSD Main Menu

8. Screen Adjustment

There are seven items in the main menu:

Auto Set	Auto configure the Brightness, Contrast, Vertical & Horizontal position, Pixel clock frequency, Video signal amplification and Tune
Brightness	Setup of brightness of the panel
Contrast	Setup of contrast of the panel
Colour	Configure the image colour
Position	Setup the image position within the panel
Image	Configure the image frequency and phase
Miscellaneous	Miscellaneous settings

8-2 Quick Start

Initial Setup

Make sure your graphics adapter has the following settings: 1024 x 768 resolution with refresh rate at 60 Hz (or 70 Hz) for MQ215 model, 800 x 600 resolution with refresh rate at 60 Hz (or 70 Hz) for MQ212 model. In order to obtain the best possible picture on your new MultiQ Monitor press [-] and [+] buttons simultaneously for Auto Configuration. This procedure only has to be done once and the monitor will remember its optimal settings in the future.

If you are not quite satisfied follow the instructions in chapter 8-4 below.

8-3 Video Input Sources

(Only support to DVI-I function monitor.)

The following table shows the OSD functions that are supported by different video input sources.

Please make sure which video source you are using, then select the correct functions in the OSD display. Not available selections will be grayed out.

VIDEO INPUT / OSD ITEM	Analog	Digital
AUTO SET	AVAILABLE	NOT AVAILABLE
BRIGHTNESS	AVAILABLE	AVAILABLE
CONTRAST	AVAILABLE	AVAILABLE
COLOR	AVAILABLE	NOT AVAILABLE
POSITION	AVAILABLE	NOT AVAILABLE
H-POSITION	AVAILABLE	NOT AVAILABLE
V-POSITION	AVAILABLE	NOT AVAILABLE
IMAGE	AVAILABLE	NOT AVAILABLE
TUNE	AVAILABLE	NOT AVAILABLE
DOT CLOCK	AVAILABLE	NOT AVAILABLE
SHARPNESS	AVAILABLE	NOT AVAILABLE
AUTO COLOUR	AVAILABLE	NOT AVAILABLE

8-4 Auto Set

The Auto Set function is intended for use on Macintosh and PCs running Windows. It may not function properly if any of the following applies:

- PC running MS-DOS (not Windows).
- The background colour for the "wallpaper" or "desktop" pattern is set to black or dark shades of any colour.

The main menu item "AutoSet" is used to perform automatic configuration of the Brightness, Contrast, Vertical & Horizontal Position, Pixel clock frequency, Video signal amplification and Tune.

1. Enter the Windows Shut-down screen (Press "Start button" and select "Shut down" to get a "grayed" screen) or open an empty document (white page) in Microsoft Word or Notepad. **Note**: The **Wallpaper** colour CAN NOT be black or a very dark colour.
2. Enter OSD Main Menu and Chose the "Auto Set". A confirmation box is displayed to confirm the user selection. The default selection in the box is "NO" and is highlighted by a yellow bar. If the MENU key is pressed, the main menu is re-displayed and nothing is changed. A message "Please Wait" is displayed after "YES" is selected and automatic configuration is started. After the process is completed successfully, a message "Completed" is displayed.
3. If you are still not satisfied with the picture quality, you could choose CONTRAST in the OSD Main Menu and adjust it. You can also manually adjust PHASE, CLOCK, etc. in the OSD.

8-5 Brightness

The main menu item "Brightness" is used to adjust the brightness of the panel. A slider with current brightness value is displayed. The range of brightness adjustment value is 0 to 100.

8-6 Contrast

The main menu item "Contrast” is used to adjust the contrast of the panel. A slider with current contrast value is displayed. The range of contrast adjustment value is 0 to 100.

8-7 Colour

The item “Colour ” is used to select the default colour temperature. Move the cursor up and down by using the [+] and [–] keys, and then press [SELECT] to enter the default settings (9300K, 6500K, USER COLOUR). Press [MENU] to go back to the previous menu.

8-7-1 RGB ADJUST

The main menu item "RGB ADJUST” is used to adjust the gain of the R, G and B channels on the ADC (Analogue to Digital Converter). A slider with current contrast value is displayed. The range of contrast adjustment value is 0 to 100.

8-7-2 Black Level

The item “Black Level” is used to adjust the black-level (zero level offset) of the R, G and B channels on the AD-converters. The range of black level adjustment value is 0 to 100.

8-8 Position

The main menu item "Position” is a sub-menu which has items to adjust picture position within the panel. The item "H-Position” and "V-Position” allows user to adjust the horizontal and vertical position manually.

8-8-1 Horizontal Position

The item "H-Position” is used to adjust the horizontal image position. A slider with current value is displayed. The range of the horizontal position adjustment value is 0 to 100.

8-8-2 Vertical Position

The item "V-Position” is used to adjust the vertical image position. A slider with current value is displayed. The range of vertical position adjustment value is 0 to 100.

8-9 Image

The main menu item "Image” is a sub-menu, which has items to adjust the monitor image. The items "Tune” and "Clock” is used to adjust the phase and frequency of the image.

8-9-1 Tune

The item "Tune” is used to adjust the ADC sample pixel clock. A slider with current value is displayed. The range of adjustment is 0 to 100 for 0 to 360 degrees.

8-9-2 Dot Clock

The item "Dot Clock” is used to adjust the number of clocks (pixels) per line (sample per line). A slider with current value is displayed.

8-9-3 SHARPNESS

Used to adjust the video quality to be sharp or less sharp (specially for text mode).

8-9-4 AUTO COLOUR

Used to adjust the gain and offset of the Red, Green, and Blue channels.

8-10 Miscellaneous

The main menu item "Miscellaneous” is a sub-menu which is used for miscellaneous OSD settings. There are 5 sub-menus: “Input select” (Only support to DVI-I function monitor), "Factory Reset”, “Language”, “OSD Position” and “LCD Info”.

8-10-1 Input Select

This is selecting the applicable input source: Analog , Digital. (Only support to DVI-I function monitor.)
ANALOG: signal from PC system graphics card.
DIGITAL: signal from PC system graphics card.

8. Screen Adjustment

8-10-2 Factory Reset

The item "Factory Reset" is used to reload all the factory default parameters. All the previous user changes in EEPROM are replaced by the defaults. A confirmation box is displayed to confirm the user selection. The default selection in the box is "NO" and is highlighted by a yellow bar. If the [MENU] key is pressed, the previous menu is displayed. A message "Please Wait" is displayed after "YES" is selected and factory settings are restored. After the process is completed successfully, a message "Completed" is displayed.

8-10-3 Language

Here you can select the OSD menu in 6 languages: ENGLISH, GERMAN, FRENCH, ITALIAN, SPANISH and SWEDISH. For example: If you want to show the menu in German:

Key [MENU]: Press and hold less than 1 second and key [+] or [-] to move up or down the current menu. Choose MISCELLANEOUS, and then move up or down to GERMAN, press [SELECT] and your OSD menu will be shown in GERMAN.

8-10-4 OSD Position

The item "OSD Position" is used to setup the OSD menu position. The OSD menu horizontal and vertical position is adjusted separately. Each position adjustment item will bring up the slider window. The maximum value of the sliders are based on the size of the OSD menu.

8-10-5 LCD Info

LCD Info shows information about this LCD monitor.
For example:

MQ212 model
VERSION: "AU2N00.1Q A"
H-FREQ: 37.8KHZ
V-FREQ: 60.0HZ
RESOLUTION: 800*600

MQ215 model
VERSION: "CHN00.1Q A"
H-FREQ: 48.4KHZ
V-FREQ: 60.0HZ
RESOLUTION: 1024*768

9. Troubleshooting Tips

In the event that you experience trouble with your Monitor, check the following items before contacting the dealer from whom the Monitor was purchased. The most common problems usually involve an incorrect connection from the Graphics card to the Monitor. We recommend that you also consult your Graphics card User's manual during the Troubleshooting Procedure. Do not exceed the maximum refresh rate recommended for the monitor.

Problem	Troubleshooting Tip
No image on monitor screen?	1. Check that power cord of the Computer has been plugged securely into wall outlet. 2. Check that power switch of the Monitor has been pressed and LED on the front of the Monitor is lit. 3. Check that Video (Signal) Cable from the Monitor has been securely and correctly connected. 4. Check that Graphics card is firmly seated in card slot of Computer motherboard. 5. Check that the video input from the Graphics card falls within the timing range (listed in the table of section 6) of the Monitor.
Keys do not work properly?	1. Check whether the" key-lock" function is enabled or disabled.
Abnormal image.	1. Check that the video input from the Graphics card falls within the timing range (listed in the table of section 6) of the Monitor. 2. Check that Video (Signal) Cable from the Monitor has been securely and correctly connected to the Video Connector at the rear side of the Computer.
Colours of image on screen are abnormal	1. Check that Video (Signal) Cable from the displays has been securely and correctly connected to the 15-pin Video Connector at the rear side of the computer.
Disturbances on Screen	1. OSD adjustment is incorrect. Please consult section 7 for OSD screen adjustment procedures. 2. Press [-] and [+] buttons simultaneously to start an Auto Configuration.

10. Specification

	MQ215 series model	
LCD panel type	15.0”	
Resolution	XGA 1024 x 768 max.	
Pixel dimension	0.297 (H) x 0.297 (V)	
LCD monitor colour	16,800,000 Colours	
OSD control	Autoset, Backlight, Contrast, Colour, Position, Image, Miscellaneous	
Manual control keys	[-], [+], [Power], [Select], [Menu]	
Viewing angle	H: -70° ~ 70° max. V: -60° ~ 65° max.	
Tilt	With Stand: +70°, 0°.	
Contrast ratio	500:1 Typ.	
Brightness	250 cd/m^2 Typ.	
Response time	**8** ms Typ. (Tr + Tf)	
Active display area	304.1 mm (H) x 228.1 mm (V)	
AC/DC adapter	Input: AC 100 ~ 240 V, 50 ~ 60 Hz Output: +12 V DC	
Monitor rating	12Vdc, 3A	
Input signal	Video: Analogue 0.7 Vp-p. 75 ohms Sync.: TTL Level, Positive /Negative, Separate Sync	DVI: REV1.0 Digital, Single T.M.D.S. (Only support to DVI-I function monitor.)
Input connector	15 Pin D-Sub.	29 Pin DVI-I
Power management	VESA DPMS Compatible Energy Star	
Regulation	Safety: UL / GS / ERGO / ISO 13406-2 EMI: CE / FCC Environmental: TCO99 (option) Medical EN60601/ EN55011 (option)	
Dimensions	Stand: 317 (H) X356 (W) X129 (D) mm VESA: 283 (H) x 356 (W) x 49 (D) mm	
Weight (Net)	Stand: 5.5 kg	VESA: 4.5 kg
Accessory	AC/DC adapter, power cord, VGA cable or DVI cable. Medical: ground wire (option)	
Temperature	Operation: 0 ~ 40 °C	
Transport & Storage	Ambient Temperature: -10 ~ 60 °C Humidity Range: 10 ~ 100 % Atmospheric Pressure: 500hPa ~ 1060hPa	
Plug & Play	DDC2B	
Speaker	1.5 W x 2 (Option)	
MSR	Three tracks, USB or RS-232 interface. (Option)	
Touch panel	Capacitive / Resistive, USB or RS-232 interface. (Option)	
Power USB-Hub	Option	

10. Specification

	MQ212 series model	
LCD panel type	12.1”	
Resolution	SVGA 800 x 600 max.	
Pixel dimension	0.3075 (H) x 0.3075 (V)	
LCD monitor colour	262,144 Colours	
OSD control	Autoset, Backlight, Contrast, Colour, Position, Image, Miscellaneous	
Manual control keys	[-], [+], [Power], [Select], [Menu]	
Viewing angle	H: -70° ~ 70° max. V: -60° ~ 50° max.	
Tilt	With Stand: +70°, 0°.	
Contrast ratio	500:1 Typ.	
Brightness	400 cd/m^2 Typ.	
Response time	35 ms Typ. (Tr + Tf)	
Active display area	246.0 mm (H) x 184.5 mm (V)	
AC/DC adapter	Input: AC 100 ~ 240 V, 50 ~ 60 Hz Output: +12 V DC	
Monitor rating	12Vdc, 2A	
Input signal	Video: Analogue 0.7 Vp-p. 75 ohms Sync.: TTL Level, Positive /Negative, Separate Sync	DVI: REV1.0 Digital, Single T.M.D.S. (Only support to DVI-I function monitor.)
Input connector	15 Pin D-Sub.	29 Pin DVI-I
Power management	VESA DPMS Compatible Energy Star	
Regulation	Safety: UL / GS / ERGO / ISO 13406-2 EMI: CE / FCC Environmental: TCO99 (option) Medical EN60601/ EN55011 (option)	
Dimensions	Stand: 283 (H) X299 (W) X129 (D) mm VESA: 250 (H) x 299 (W) x 49 (D) mm	
Weight (Net)	Stand: 4.3 kg	VESA: 3.3 kg
Accessory	AC/DC adapter, power cord, VGA cable or DVI cable. Medical: ground wire (option)	
Temperature	Operation: 0 ~ 40 °C	
Transport & Storage	Ambient Temperature: -10 ~ 60 °C Humidity Range: 10 ~ 100 % Atmospheric Pressure: 500hPa ~ 1060hPa	
Plug & Play	DDC2B	
Speaker	1.5 W x 2 (Optional)	
MSR	Three tracks, USB or RS-232 interface. (Option)	
Touch panel	Capacitive / Resistive, USB or RS-232 interface. (Option)	
Power USB-Hub	Option	

11. Energy Declaration

This monitor is equipped with a function for saving energy, which supports the VESA Monitor Management Signalling (DPMS) standard. This means that the monitor must be connected to a computer that supports the VESA DPMS to fulfil the requirements in the NUTEK specification 803299/94/96. Time settings are adjusted from the system unit by software. From indicated inactivity to Power Saving Position A2 the total time must not be set to more than 70 minutes.

NUTEK	VESA state	LED indicator	Power consumption
Normal operation	On	Green	≦ 23W
Power Saving Position A1	Suspend	Green Flashing	≦ 2W
Power Saving Position A2	Off	Green Flashing	≦ 1W

We recommend to switch off the monitor when it is not in use for quite a long time.

12. Appendix

- **Safety Guidelines**

Warning: This device must be operated with the original power supply, part number: HJC/HASU11FB
CHI/CH-1204M. (For medical model only)

CAUTION: The socket-outlet should be installed near the equipment and should be easily accessible.

CAUTION: Use a power cable that is properly grounded. Always use the appropriate AC cord that is certified for the individual country. Some examples are listed below:

USA……...UL Switzerland…….SEV
Canada……..CSA Britain……..BASE/BS
Germany……VDE Japan…….Electric Appliance Control Act

IMPORTANT NOTICE CONCERNING POWER CORD SELECTION

The power cord set for this unit has been enclosed and been selected according to the country of destination and must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set, or if the cord set is not enclosed. The female receptacle of the cord set must meet IEC-60320 requirements and may look like (Figure A1 below):

Figure A1

Figure A2

FOR THE UNITED STATES AND CANADA

In the United States and Canada the male plug is a NEMA5-15 style (Figure A2), UL Listed, and CSA Labelled. For units that are mounted on a desk or table, type SVT or SJT cord sets may be used. Any equipment standing on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult the table below for the selection criteria for power cords used in the United States and Canada.

Code Type	Size of Conductors in Cord	Maximum Current Rating of Unit
SJT	18 AWG 16 AWG 14 AWG	10 Amps 12 Amps 12 Amps
SVT	18 AWG 17 AWG	10 Amps 12 Amps

12. Appendix

FOR EUROPEAN COUNTRIES

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR-Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors.

AC PLUG CORD PRECAUTIONS FOR THE UNITED KINGDOM

For your safety please read the following text carefully.

- If the fitted moulded plug is unsuitable for the socket outlet then the plug should be cut off and disposed of safely.
- There is a danger of severe electrical shock if the cut off plug is inserted into an appropriate socket.
- If a new plug is to be fitted, please observe the wiring code as shown below.
- If in any doubt, please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE EARTHED.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow: Earth	Blue: Neutral	Brown: Live

If the coloured wires of the mains lead of this appliance do not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol or coloured GREEN or GREEN-AND-YELLOW. The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

If you have any questions concerning which proper power cord to use, please consult with the dealer from whom you have purchased the product.

CE Conformity for Europe

CE

The device complies with the requirements of the ECC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to "Electromagnetic compatibility", and 73/23/EEC as amended by 93/68/EEC Art.13 with regard to "Safety".

12. Appendix

FOR medical model only:

Safety Instructions

Type of protection (electrical): Class III equipment

Explanation of symbols

	Alternating current
	Direct current
	Protective earth (ground)
	Attention, consult ACCOMPANYING DOCUMENTS
	Dangerous voltage

Disposal

The lamp in this product contains mercury. For disposal, return to MultiQ or follow local governing ordinances or hospital procedure.

Cleaning

- **MAKE SURE THE LCD DISPLAY IS TURNED OFF.**
- **NEVER SPRAY OR POUR ANY LIQUID DIRECTLY ONTO THE SCREEN OR CASE.**

To clean the screen:

1. Wipe the screen with a clean, soft, line-free cloth. This removes dust and other particles.
2. If still not clear, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, line-free cloth, and wipe then screen.

To clean the case:

1. Use a soft, dry cloth.
2. If still not clean, apply a small amount of a non-ammonia, non-alcohol based, mild non-abrasive detergent onto a clean, soft, line-free cloth, and wipe the surface.